

**AUTOMATIC CONFIGURATION OF AN ADDRESS ALLOCATION  
MECHANISM IN A COMPUTER NETWORK**

**ABSTRACT OF THE DISCLOSURE**

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The invention provides a method, computer program and system for automatic and dynamic configuration of an address allocation mechanism in a computer network. The invention provides for allocating network addresses to the devices in the computer network by obtaining routing protocol messages (301), the routing protocol messages being exchanged in the computer network for routing purposes. Then the invention obtains network prefix addresses that correspond to sub-networks (501), the network prefix addresses being obtained using the routing protocol messages. Thereafter, the invention determines a range of valid network addresses for the devices using the network prefix addresses (503). These valid network addresses can then be allocated to hosts requiring network addresses. The current invention also continuously monitors the routing protocol messages to dynamically adapt the address allocation mechanism with changes in the addressing configuration of the computer network.

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FIG. 3 accompanies this abstract